The Opportunity Project

2020 Earth Sprints

Built Environment Cohort

July - October, 2020

Census Open Innovation Labs

U.S. Census Bureau
Built Environment Problem Statements

Paving a Path to Economic Self-Sufficiency for Low Income Families
*U.S. Department of Housing & Urban Development*

Assisting Recently Resettled Refugees
*USA for UNHCR*

Facilitating Sustainable Rural Economic Development
*U.S. Environmental Protection Agency*

Tracking the Impact of Emergency & Disaster Funding
*Office of Management & Budget*

Sprint Timeline

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Paving a Path to Economic Self-Sufficiency
U.S. Department of Housing & Urban Development

Executive champion: Benjamin Carson, Secretary of U.S. Department of Housing and Urban Development

Challenge: Create digital collaboration platforms that enable low income families to holistically assess their needs and connect with the best federal, state and local programs to equip and empower them toward self-sufficiency and economic mobility.

Problem: Approximately 30 departments and agencies across the federal government offer over 200 federal programs that could assist low income families in their journeys towards self-sufficiency. There are also innumerable private programs intended to achieve the same end. However, the sheer number of programs and the lack of integration and accessibility create unnecessary barriers for families to find, connect with, and utilize the services that best suit their particular needs. Heads of households also lack a way to assess their own strengths and weaknesses, to set goals, create a roadmap, and engage with community partners to accelerate their journey into economic mobility. Through its EnVision Center initiative, HUD designated brick and mortar facilities to serve as centralized hubs to support low-income households seeking to achieve self-sufficiency. While the centers are effective, their reach is limited to their local areas.

Why this problem matters: Solving this issue and delivering user-friendly solutions that integrate services aligned to individualized roadmaps will help countless low-income families move towards self-sufficiency and achieve their life goals. It will also improve the effectiveness and efficiency of the broad array of individual uncoordinated programs intended to help the poor by integrating and creating synergy between them and aligning them with each client’s needs. Despite the best efforts of policy and program experts, the hard work of program managers and case workers, and the expenditure of over $1 trillion per year over decades, the current system has not been successful in removing the barriers that hinder families from moving up and out of government dependency and eliminating generational poverty. This is a “systems” problem requiring an innovative approach that leverages modern technology and crowdsourcing within local communities across the country.

Vision for sprint outcomes: To align with the structure and objectives of the EnVision Center initiative and its operating concept of integrated service delivery, sprint products could:

- Help families to assess their needs and available personal resources
- Curate resources from government and community-based programs that align with the unique needs of a particular family
- Match families/individuals with qualified community-based service providers or government programs to meet specific needs for workforce readiness, financial and digital literacy, educational assistance and job training
- Match private or philanthropic funding to support a family or individual’s journey toward self-sufficiency
**Target end users:** Low to moderate income heads of households; case managers; guidance counselors; life coaches; community and ministry leaders; service providers; philanthropic organizations; federal, state and local government service program managers, policy makers, legislators.

**Related open data sets:**
- Picture of Subsidized Households (link)
- HUD Data Portal (link)
- American Housing Survey (link)
- Benefits.gov (link)
- Poverty Data, HHS (link)
- Bureau of Labor Statistics (link)
- Department of Commerce (link)
- HHS Data Initiative (link)
- HHS Social Services Programs (link)
- HHS Wellness Programs (link)
- UC Berkeley Social Welfare Data (link)

**Lead POCs:**
- Gregory Castello, Director, Ideation Division, HUD
- Christopher Bourne, Deputy Assistant Secretary for Innovation, HUD
Assisting Recently Resettled Refugees
USA for UNHCR

**Challenge:** Create a tool that connects resettled refugees with resources and vital services, such as access to medical care and mental health treatment, English language learning, job training, education, etc. These resources might be available through government agencies, nonprofits, community based organizations, private sector actors and the like.

**Problem:** There are many actors in the nonprofit space that help resettled refugees at varying stages of integration into American society and their new communities. It can be difficult at times for refugees to identify where to go for help, particularly as their relationship with the nine formal resettlement agencies transitions. In addition, many grassroots, faith-based and community-based organizations that offer critical support to resettled refugee families lack the opportunity to share best practices and solutions across geographies with other similar organizations that could improve the livelihoods of resettled refugees throughout the U.S.

**Why this problem matters:** In the last five years, more than 250,000 refugees have been resettled in the United States. Refugees are provided assistance by one of the nine resettlement agencies for 90 days, after which they are responsible for navigating their path to self-sufficiency and integration into American society, but often lacking the language skills necessary. There are many organizations that provide assistance after the resettlement agencies, but many refugees may not be familiar with these services or unsure of how to ask for help. By designing a solution to connect resettled refugees to nonprofits and community-based organizations, the following outcomes may be achieved: (1) refugees will have increased familiarity of local services; (2) refugees can select services holistically (education, mental health, jobs, etc.); (3) refugee can be empowered to successfully resettle; (4) refugees can have their specific needs met versus a one-size fits all approach.

**Vision for sprint outcomes:** By increasing access to existing services from nonprofits and community-based organizations, resettled refugees will be better able to navigate the complex infrastructure of government and nonprofit services and move towards self-sufficiency after experiencing displacement.

**Target end users:** Resettled refugees in the United States, nonprofits that provide help to refugees

**Related open data sets:**
- Hello Neighbor ([link](#))
- Kids in Need of Defense ([link](#))
- Refugee Congress ([link](#))

**Lead POCs:**
- Nicole Smith, Data Analyst, USA for UNHCR
- Rita Ko, Director of The Hive, USA for UNHCR
Facilitating Rural Economic Development
U.S. Environmental Protection Agency

Challenge: Create digital tools that help rural communities access and use data to implement solutions to economic, environmental, and human health challenges, taking care to reach places that have limited professional capacity and small budgets.

Executive champion: Matthew Dalbey, Office Director, Office of Community Revitalization, U.S. Environmental Protection Agency

Problem: In a rural Delaware community, a much-needed new health center is built in an open space designated as coastal land along a six-lane highway. Less than a quarter mile away, the walkable historic downtown is experiencing growing business vacancies. How might public data have led local decision makers to choose a more accessible site that could have catalyzed new business opportunities on Main Street? How much additional coastal open space could be conserved? Considering far-reaching challenges like loss of industry, extreme weather events, other economic shocks, and even lack of access to data and broadband internet, small towns and rural communities are struggling to strengthen their economies and revive downtowns while providing healthier lifestyles and cleaner environments for their residents. By taking advantage of walkable street grids and historic architecture built by generations gone, rural communities can also improve air quality, protect local watersheds, conserve open space, and reduce waste. However, rural communities often lack the capacity, data, strategies, or financial resources to tackle downtown revitalization, as they often have limited resources dedicated to comprehensive planning and regional collaboration. What’s more, rural communities may lack access to private and public capital for sustainable economic development and revitalization. Lack of or limited access to broadband internet also takes a toll on a community’s ability to access economic opportunity. The result can be development that fails to take advantage of the communities’ assets, creates long-term maintenance costs, and undermines health and environmental goals.

Why this problem matters: Rural economies must maintain a fine balance between economic competitiveness and agricultural and natural land conservation, as well as between maintaining existing roads, sewers, and buildings and funding for services needed to help residents maintain a good quality of life. In particular, rural communities located close to metropolitan areas or amenities (e.g., ski areas, national parks) may struggle to preserve their rural character in the face of growth pressures, as they experience conversion of farmland and natural land to development. Rural communities can achieve their goals for growth and development while maintaining their distinctive rural character by encouraging growth in town, where businesses can thrive on a walkable main street and families can live close to their daily destinations, protect rural landscapes, improve air and water quality, provide places for recreation, and create tourist attractions that bring investments into the local economy.
**Vision for sprint outcomes:** Rural communities can quickly and easily access curated datasets and implementation strategies to support sustainable economic growth—growth that is community-driven, leverages existing local assets, and provides walkable, compact downtowns to support the health of residents and ecosystems.

**Target end users:** Local officials or other local decision makers; regional planning groups; rural or tribal communities; communities that have been impacted by recent pandemic outfall, loss of key industry, and/or extreme weather events are suggested.

**Related open data sets:**
- Demographic and socioeconomic data (e.g., human capital, labor force characteristics) – U.S.Census (link)
- Walkability and transit access – EPA Smart Location Database (link)
- Environmental, geographic, climatic, cultural, and natural resource profiles – EPA EnviroAtlas, Fish & Wildlife Service (link)
- Social Vulnerability Index, CDC (link)
- Food security and food access – USDA Food Environment Atlas (link)
- USDA Atlas of Rural and Small Towns (link)
- Economic performance factors (e.g., housing, health services, educational, cultural and recreational resources, public safety)
- Assets such as anchor institutions, access to nature amenities, new and emerging economic drivers
- Infrastructure assets (e.g., water, sewer, telecommunications/broadband, energy distribution systems, transportation
- Emerging or declining clusters or industry sectors
- Workforce factors (e.g., innovation, supply chains, state and local laws, financial resources, transportation, energy cost, taxes, bonding capacity, land use patterns)

**Lead POCs:**
- Alexis Rourk, Senior Planner, Office of Community Revitalization, EPA
- Sarah Mazur, Associate Program Director, Sustainable and Healthy Communities Research Program, EPA
- David J. Smith, National Center for Environmental Economics, EPA
Tracking the Impact of Emergency & Disaster Funding
Office of Management & Budget

Challenge: Create digital tools and resources to track federal financial assistance award spending starting from Federal awards and flowing down to state and/or local spend in response to one or more emergencies and disasters (e.g., COVID-19 Coronavirus pandemic, hurricanes, earthquakes, and other disasters)

Executive champion: Patrick Corrigan, Senior Advisor, Office of Federal Financial Management, Office of Management & Budget

Background: Federal response to emergencies and disasters provides direct economic relief to the American people, including individuals, small businesses, and state and local governments, as well as those on the front lines. These funds are provided by numerous agencies across the federal government which keep extensive data on spending, but much of the data currently exists in silos. Furthermore, the public often does not have accessible ways to find information on how these funds are implemented on the state and local level. Although the Federal government has made strides with improving accountability and transparency, increasing accessibility around how Federal dollars flow to state and local communities in times of emergency would allow the public to better understand and assess how taxpayer funds are allocated and implemented by recipient governments and communities.

Why this problem matters: The federal government is a key provider of funding in times of crisis. Tracking how Federal spend and programs are filtered down and implemented at the working level can enhance data transparency, promote more effective emergency and disaster relief, and improve services to the American public. A greater understanding of how funds are dispersed and broken down can help decision-makers at all levels and across organizations better understand program effectiveness and aid in making more informed decisions about use of funds. Furthermore, more transparent access to such tracking is important to keep the federal government accountable for making the best intended use of these funds in the future, as well to illustrate where gaps may exist and signify highest priorities for future emergency funding. Lastly, better tracking of federal funding flows would improve the ability of the public and decision-makers at all levels to learn how these dollars and resulting programs affect local communities.

Vision for sprint outcomes: Through access to tracking of emergency and disaster funding data and user friendly digital tools, more Americans will be aware of how America’s tax dollars are being spent, understand where the largest need is, and how each state and local community addresses their unique needs. This will allow for greater understanding of the direct correlation of impact to the state and local governments.
Target end users: American public, researchers, engaged citizens, state/local communities, rural or tribal communities, grant/loan recipients, small businesses, managers of disaster funds, appropriators

Related open data sets:
- USASpending (link)
- Disaster spending reports, FEMA (link)
- Federal Agency Congressional Justifications data
- Annual Performance Reports (more available)
  - FEMA (link)
  - HHS (link)
- Additional state and local datasets available

Lead POCs:
- Joel Savary, OMB Policy Analyst
- Natalie Rico, OMB Policy Analyst
- Lindsay Fraser, OMB Pathways Analyst
## Sprint #2 Timeline: July – October *(Dates Subject to Change)*

<table>
<thead>
<tr>
<th>Week</th>
<th>Milestone</th>
<th>Activity</th>
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<tbody>
<tr>
<td>July 20</td>
<td><strong>Kick Off Call (7/23)</strong></td>
<td>TOP team launches sprint with all participants</td>
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<td>Slack channel launches</td>
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<tr>
<td>July 27</td>
<td><strong>User Engagement Workshop (7/30)</strong></td>
<td>Participants join a virtual workshop to connect with each other for real time user research and ideation</td>
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<tr>
<td>Aug 3</td>
<td></td>
<td>Teams connect with user advocates to conduct user research and better understand the challenge they are working on</td>
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<td>Aug 10</td>
<td><strong>User Research Milestone (8/13)</strong></td>
<td>Teams share learning from user research that will inform design of their product, and connect with user advocates for more feedback</td>
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<tr>
<td>Aug 17</td>
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<td>Teams continue user research and begin data exploration</td>
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<tr>
<td>Aug 24</td>
<td><strong>Data Q&amp;A (8/27)</strong></td>
<td>Data dive Q&amp;A with data stewards to answer questions on federal data sets</td>
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<td>Aug 31</td>
<td>Sept 4</td>
<td>Teams continue exploring data and developing products</td>
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<tr>
<td>Sept 7</td>
<td>Sept 11</td>
<td>Teams continue exploring data and developing products</td>
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<td>Sept 14</td>
<td><strong>Concept Pitch (9/17)</strong></td>
<td>Participants come together for a virtual demo of the tools in progress. Teams share concepts, wireframes, and works in progress, with wide variation in product maturity. Sprint participants provide feedback on the tools in development</td>
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<td>Sept 21</td>
<td>Sept 25</td>
<td>Teams continue building products and conduct user testing</td>
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<td>Sept 28</td>
<td>Oct 2</td>
<td>Teams come together to showcase and share feedback on more mature versions of their products. Typically, tools have reached at least wireframes and have some functioning features by this stage</td>
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<td>Oct 5</td>
<td><strong>Product Sustainability Milestone (10/1)</strong></td>
<td>Tech teams, product advisors, and past tech teams join a session to share best practices and strategies for making TOP tools lasting and effective</td>
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<td>Oct 12</td>
<td>Oct 16</td>
<td>Teams continue building prototypes/products</td>
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<td>Oct 19</td>
<td><strong>MVP Demos (Dates TBD)</strong></td>
<td>Teams share MVP with TOP team prior to collective rollout</td>
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<td>December</td>
<td><strong>TOP Demo Day</strong></td>
<td>Teams present their sprint products to government, industry, media, and other stakeholders at open press Demo Day event</td>
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